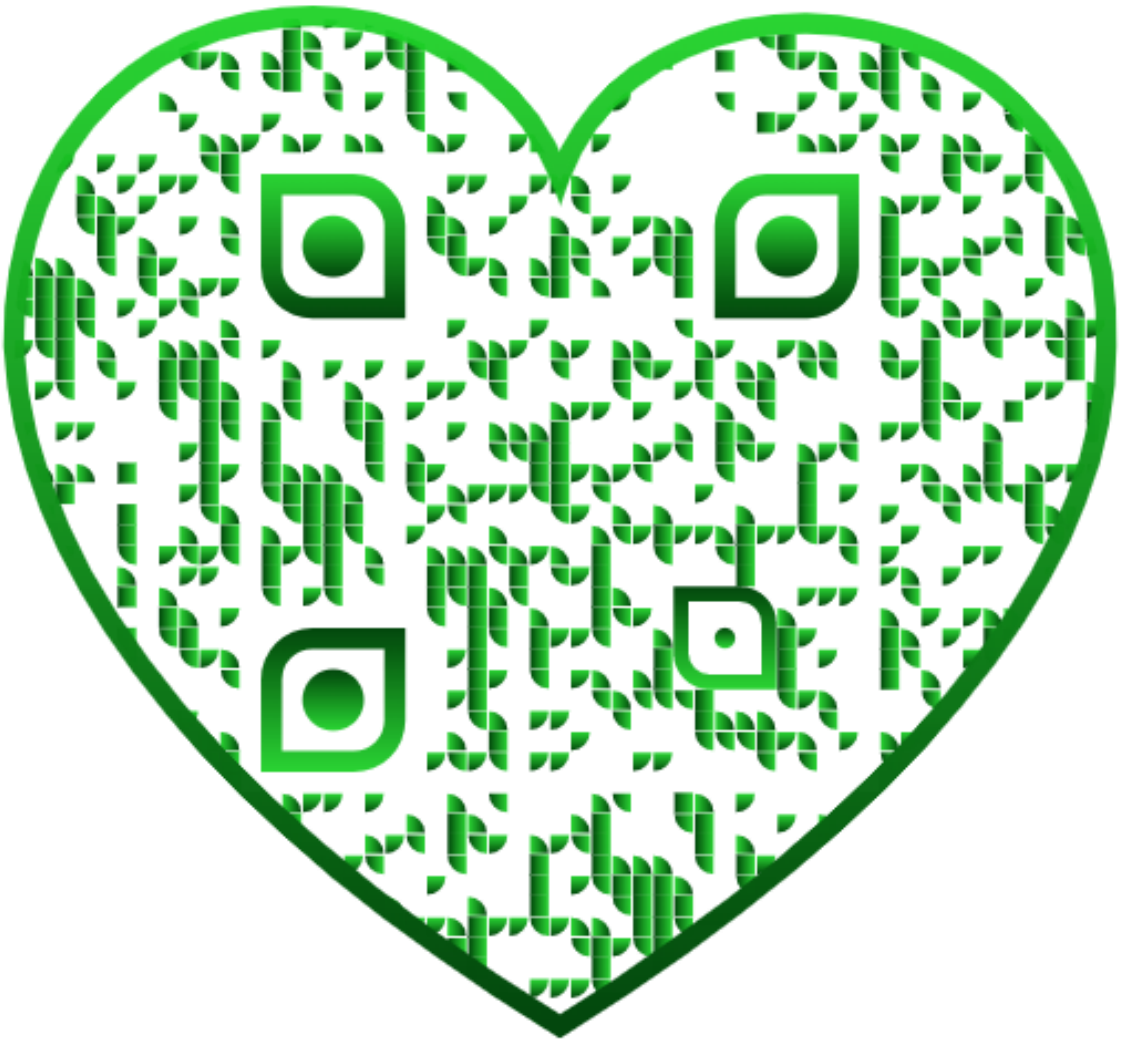
m	Type of Alkaloids	Commen(C.N) and Scientific name (*S.N)*	Familly	Chemical Constituents	Uses
1	TROPANE ALKALOIDS	C.N: BELLADONNA *S.N: Atropa belladonna*	Solanaceae.	l-hyoscyamine hyosceine atropine	1- treatment of peptic ulcer; functional digestive disorders, including spastic, mucous and ulcerative colitis; diarrhoea, and pancreatitis. 2- it is used to control excess motor activityof the gastrointestinal tract and spasm of the urinary tract 3- anticholinergic, narcotic, sedative, diuretic mydriatic. 4- used as anodyneand to check secretion 5- It relieves spasm of gutor respiratory tract 6- acts as a parasympathetic depressant
2	INDOLE ALKALOIDS	C.N: NUX VOMICA *S.N: Strychnos nux vomica*	Loganiaceae.	Strychnine and Brucine traces of strychnicine, and a glucoside Loganin, fatty matter, caffeotannic acid and a trace of copper	1- In the mouth it acts as a bitter, increasing appetite 2- stimulates periZstalsis, in chronic constipation due to atony of the bowel it is often combined with cascara and other laxatives with good effects. 3- increasing the flow of gastric juice. 4- it exerts its characteristic effects upon 5- Strychnine has a stimulant action on spinal cord and reflex movements are better 6- It is considered as nervine and sex tonic.
3	PYRIDINE AND PIPERIDINE ALKALOIDS	C.N: TOBACCO *S.N: Nicotiana tobaccum*	Solanaceae.	nicotine, nicotianin, nicotinine, nicoteine, nicoteline	1-Nicotine is very like coniine and lobeline in its pharmacological action 2- It is used as a sedative, diuretic, expectorant, discutient and sialagogue 3- The leaves in combination with the leaves of belladonna or stramonium make an excellent application for obstinate ulcers, painful tremors and spasmodic affections. 4-Tobacco leaves are made wet and applied for piles 5- Externally nicotine is an antiseptic. Nicotine exerts stimulant effects on heart and NS.
4	IMIDAZOLE ALKALOIDS	C.N: PILOCARPUS *S.N: Pilocarpus jaborandi*	Rutaceae	isopilocarpine, pilocarpidine, pilosine, pseudopilocarpine and isopilosine.	1- Pilocarpine is antagonistic to atropine 2- stimulating the nerve endings paralysed by that drug, and miosis the eye. 3- use is as a powerful and rapid diaphoretic. 4- act as free salivation and excites most gland secretions, some regarding it as a galactagogu 5- used in ophthalmic practice in the treatment of glaucoma.
5	QUINOLINE ALKALOIDS	C.N: CINCHONA *S.N:* Cinchona officinalis and Cinchona succirubra Pavon.,	Rubiaceae	quinidine, quinine, cinchonine and cinchonidine.	1- It is mainly employed as antimalarial drug. 2- used as analgesic, antipyretic, protoplasmic, bitter stomachic and tonic. 3- Quinidine is cardiac depressant andCinchonidine is used in rheumatism and. Neuralgia



6	ISOQUINOLINE ALKALOIDS	C.N: IPECAC *S.N:* Cephaelis ipecacuanha Cephaelis acuminata	Rubiaceae.	emetine, : cephaeline, psychotrine and psychotrine methyl ether.	1- emetic and used as an expectorant and diaphoretic and in the treatment of amoebic dysentery 2- local irritant action. 3- Emetine has a more expectorant and less emetic action than cephaeline. 4- treatment of amoebic dysentery emetine hydrochloride is given by injection and emetine and bismuth iodide by mouth. 5-Psychotrine and its methyl ether are selective inhibitors of human immunodeficiency virus.
7	STEROIDAL ALKALOIDS	C.N: VERATRUM *S.N: Veratrum viride* Aiton and *Veratrum album*	Liliaceae.	caffeine, tannin, fixed oil and proteins	1- Veratrum is used as antihypertensive, cardiac depressant, sedative and insecticides. 2- used for relief in irritation of the nervous system, in convulsions, mania, neuralgia, headache, febrile and inflammatory affections of the respiratory organs and acute tonsillitis. 3- American veratrum is used for the preparation of Veriloid, a mixture of the hypotensive alkaloids 4- European veratrum is used for the preparation of the protoveratrines. The drugs are used as insecticides.
8	PURINE ALKALOIDS	C.N: COFFEE *S.N: Coffea arabica*	Rubiaceae	caffeine, tannin, fixed oil and proteins.	1- Coffee is widely used as a flavoring agent, as in ice cream, pastries, candies and liquors. 2- used as a stimulant, nervine and diuretic, acting on CNS, kidneys, heart and muscles. 3- Very valuable in cases of snake-bite, helping to ward off the terrible coma 4- exerts a soothing action on the vascular system, preventing a too rapid wasting of the tissues of the body.
9	DITERPENE ALKALOIDS	C.N: ACONITE *S.N: Aconitum napellus*	Ranunculaceae	aconitine, aconine	1-It is used externally as a local analgesic in liniments and to treat neuralgia, rheumatism and inflammation 2- Tincture Aconite is antipyretic in small doses.
10	AMINO ALKALOID	C.N: EPHEDRA *S.N:* Ephedra gerardiana Ephedra sinica Stapf	Ephadreaceae.	Ephedrine Pseudoephedrine Norpseudoephedrine	1- Ephedrine is antiallergenic, antiasthmatic, antispasmodic, decongestant, cough suppressant, stimulant and vasoconstrictor. 2- Pseudoephedrine is decongestant, cough suppressant 3- norpseudoephedrine is peripheral vasodilator used to treat angina..